$$\frac{3x^2y}{(3xy)^3} = \frac{3x^2y}{2nx^3y^3} (2) \sqrt{x^2b^8c^4} = \sqrt{(ab^4c^2)^2} \\
= \frac{1}{9xy^2} = \frac{1}{2nx^3y^3} = \frac{1}{2nx^3y^3}$$

$$(3) \left(\frac{yz}{x^{3}}\right)^{\frac{1}{3}}y^{2}z = \frac{y^{3}z^{3}}{2}y^{2}z \quad (4)^{3}\sqrt{a^{2}b} = (a^{2}b)^{3}$$

$$= \left(\frac{1}{y^{3}}\right)^{\frac{1}{3}}z^{\frac{4}{3}} = a^{\frac{2}{3}}b^{\frac{1}{3}}$$

$$= a^{\frac{2}{3}}b^{\frac{1}{3}}$$